

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: KONDOH et al.

Serial No.: Rule 53(b) of 09/557,827

Filed: January 4, 2002

For: HIGH FREQUENCY COMMUNICATION DEVICE

Art Unit: Unassigned (2821 previously in parent application)

Examiner: Unassigned (C. Tran previously in parent application)

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, D.C. 20231

January 4, 2002

Sir:

**IN THE SPECIFICATION**

Page 1, before line 5, insert --This is a continuation of parent application

Serial No. 09/557,827, filed April 25, 2000, allowed.--

**IN THE CLAIMS**

Please cancel claims 1-18 without prejudice or disclaimer.

Please add the following **new** claims:

--19. A communications device for receiving and transmitting signals,  
comprising:  
a box formed from a plurality of walls and having an interior,

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wherein at least a part of a wall of the plurality of walls of said box has a periodic structure to filter undesired signal wave propagations through the interior of said box.

**20.** The communications device recited in claim 19,  
wherein said periodic structure is formed on the interior wall of said box.

**21.** The communications device recited in claim 19, further comprising:  
an antenna on the exterior of the box,  
wherein a high frequency circuit element is contained in the box and provided with input and output terminals for connection with said antenna.

**22.** The communications device recited in claim 19, further comprising:  
an antenna in the interior of said box,  
wherein an orifice to pass radio waves is provided on a wall of the plurality of walls in said box in the vicinity of said antenna.

**23.** The communications device recited in claim 20, further comprising:  
an antenna being formed outside said box,  
wherein a high frequency circuit element contained in the box is provided with input and output terminals for connection with said antenna.

**24.** The communications device recited in claim 20, further comprising:  
an antenna being formed inside said box,

wherein a window for passage of radio waves is provided on a wall of said box in the vicinity of said antenna.

**25.** A high frequency receiving device, comprising:

a box having a plurality of walls and containing at least one high frequency circuit element,

wherein at least a part of a wall of said plurality of walls of said box has a periodic structure to prevent undesired signal wave propagation of high frequency waves through the interior of said box of the high frequency receiving device.

**26.** The high frequency receiving device according to claim 25,

wherein said periodic structure is formed on an interior of the wall of said plurality of walls of said box and comprises a plurality of protrusions.

**27.** The high frequency receiving device according to claim 25, further comprising:

an antenna attached to the outside of said box,

wherein said high frequency circuit element is provided with input and output terminals for connection with said antenna.

**28.** The high frequency receiving device according to claim 25, further comprising:

an antenna being formed inside said box,

wherein a window for passage of radio waves is provided on a wall of the plurality of walls of said box in the vicinity of said antenna.

**29.** The high frequency receiving device according to claim 26, further comprising:

an antenna being formed outside said box,  
wherein said high frequency circuit element is provided with input and output terminals for connection with said antenna.

**30.** The high frequency receiving device according to claim 26, further comprising:

an antenna being formed inside said box,  
wherein an orifice for passage of radio waves is provided on a wall of said box in the vicinity of said antenna.

**31.** A high frequency transmitting device, comprising:

a box containing having a plurality of walls and at least one high frequency circuit element,

wherein at least a part of a wall of said plurality of walls of said box has a periodic structure in a periodic pattern of materials or mechanical configurations to provide a filtering function to prevent undesired signal wave propagation of high frequency waves through the interior of said box of said high frequency transmitting device.

**32.** The high frequency transmitting device according to claim 31,

wherein said periodic structure is formed on an inside wall of said plurality of walls of said box.

**33.** The high frequency transmitting device according to claim 31, further comprising:

an antenna formed outside said box,  
wherein said high frequency circuit element is provided with input and output terminals for connection with said antenna.

**34.** A high frequency transmitting device according to claim 31 which further comprises:

an antenna being formed inside said box,  
wherein an orifice for passage of radio waves is provided on a wall of said box in the vicinity of said antenna.

**35.** The high frequency transmitting device according to claim 32, further comprising:

an antenna attached to the outside said box,  
wherein said high frequency circuit element is provided with input and output terminals for connection with said antenna.

**36.** The high frequency transmitting device according to claim 32, which further comprises:

an antenna being formed inside said box,  
wherein an orifice for passage of radio waves is provided on a wall of said plurality of walls of said box in the vicinity of said antenna.

## **REMARKS**

### **SPECIFIC REFERENCE TO EARLIER FILED APPLICATION(S)**

As an application in which the benefits of an earlier application are desired must contain a specific reference to the earlier filed application(s) in the first sentence of the specification (37 CFR 1.78), the specification has herein been amended to incorporate such specific reference to earlier filed application(s).

### **INFORMATION DISCLOSURE STATEMENT AND FORM PTO-1449 LISTING REFERENCE(S) CITED IN ANCESTOR APPLICATION(S)**

Submitted herewith under separate cover letter is an Information Disclosure Statement together with Form(s) PTO-1449 listing reference(s) of record in the ancestor application(s) for Examiner initialing to make such art of record in the present application.

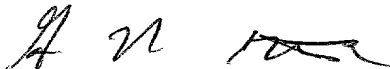
### **CLAIM FOR PRIORITY**

Applicant respectfully acknowledges that in order for a patent issuing on the instant application to obtain the benefit of priority under 35 USC 119(a-d) based on priority papers filed in an ancestor application, a claim for such foreign priority must be made in this application. Applicant herein (under separate cover letter) makes such claim for foreign priority, and respectfully submits that the priority papers were filed in ancestor application 09/557,827. Acknowledgment and confirmation of the perfection of Applicant's claim for foreign priority are respectfully requested.

Preliminary to the examination of the above-identified application Applicant herein submits the foregoing amended and added claims. It is respectfully requested that examination be performed on such claims 19-36.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR §1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (referencing case No. 520.38501CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,



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